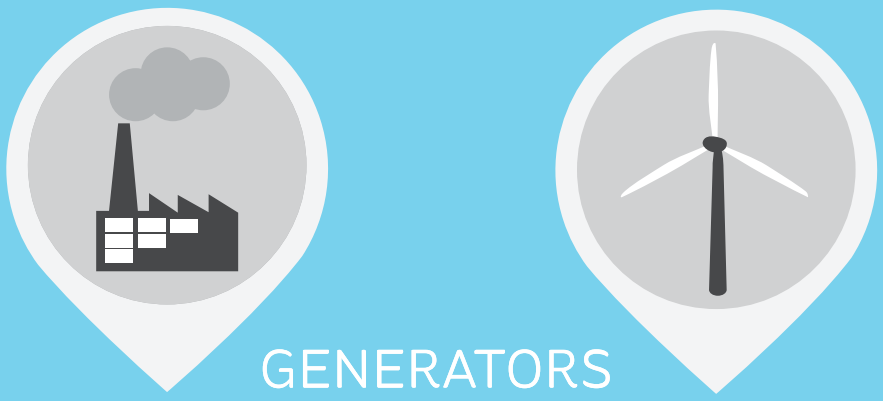
Northern Ireland Electricity Networks

# HAVE YOUR SAY

## On the future of the electricity network 2017-2024

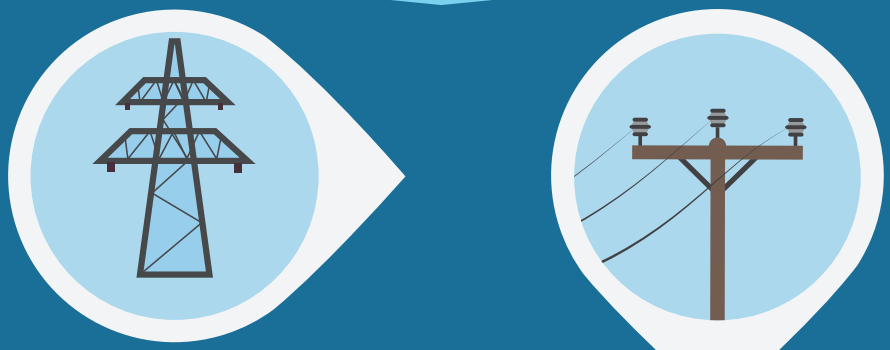
# The electricity market made simple

## WHO DOES WHAT?



### GENERATORS

Power is generated by Power stations & Renewable Generators such as wind farms.



### NETWORKS

NIE Networks transports electricity from generators on large transmission cables and pylons and on wires and poles through the distribution network.

### SUPPLIERS

Suppliers for home electricity send customers their bills. Suppliers include SSE Airtricity, Budget Energy, Electric Ireland and Power NI.

Power cuts

Connections

Meter reading

Network maintenance & development

***NIE Networks is the electricity networks business for Northern Ireland***

# Introduction

We are excited to invite you to help shape the future of the electricity network in Northern Ireland.

Our job is to make sure that the electricity network of poles, pylons, cables, wires and substations safely delivers power to all corners of Northern Ireland.

We have faced many challenges since the privatisation of the electricity industry in 1993, yet we have consistently delivered a safe, more reliable and efficient electricity network at a reasonable cost. We are proud of what we have achieved.

Our current and future challenges are no less significant and include delivering on a range of environmental obligations as we push towards a low carbon society, improving the reliability of the network and delivering an enhanced customer service experience.

We are constantly reviewing our own performance and seeking to make improvements. As we make our plans for 2017 to 2024, we want to know what you think.

In June 2016, we will be submitting our plans to the **Utility Regulator** who will review our spending plans, but first we want to hear your views, so please take the time to have your say and ensure our plans are in line with your views.

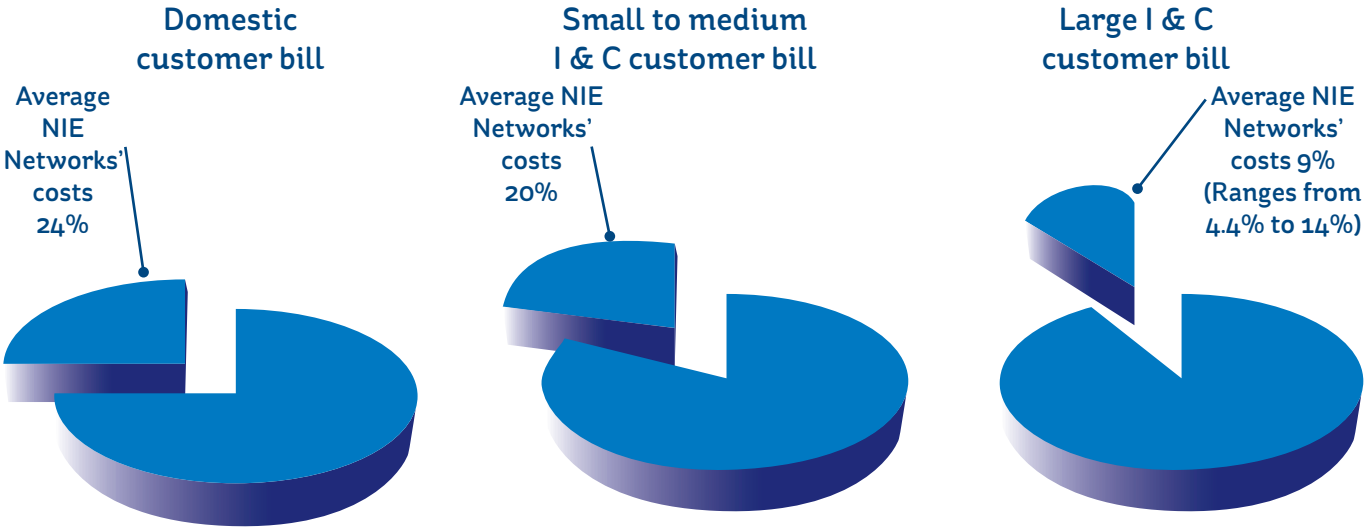
We look forward to hearing from you.

Nicholas Tarrant
Managing Director, NIE Networks

# Purpose of this document

As NIE Networks is a monopoly, we agree our network investment plans with the Utility Regulator and other industry partners. The current plan runs until 30th September 2017 and we are currently developing our plans for October 2017 to March 2024.

As this investment is paid for by Northern Ireland's current and future electricity customers, it is important to strike the balance between service levels and cost. At present, around one quarter of the domestic electricity bill goes to NIE Networks to maintain the network, respond to emergencies and deliver an appropriate service to its customers. This is about £137 per year in an average home. For business customers, the proportion paid to NIE Networks is slightly less[1].




Over the last six months we have been listening to what you have been telling us about our current service level and what you would like us to deliver in the future. This document aims to respond to this feedback with investment proposals[2] for 2017 - 2024.

Services beyond those that we currently provide will have an impact on customer bills and we have provided full details of these additional costs. Domestic customers told us that they would be willing to pay a total of **£7**[3] per annum for these improvements, however, the actual cost of these improvements are much lower and would add less than **£3** to the annual domestic customer bill.

We appreciate that you may have other views and we would like to hear them. We have asked specific questions against each of the areas proposed[4]. You may want to comment on all of the topics or just the ones that are important to you.

The feedback we have received recently and your comments on these proposals will help us develop our business plan which will be submitted to the Utility Regulator in June 2016. The Utility Regulator will also be consulting on our plans before any final decisions are made.

[1] Up to 20% for small I&C (industrial and commercial) customers and approximately 9% on average for large I&C customers. This is dependent on the point of connection to the electricity network, i.e. voltage level.
[2] All of the costs included in this document are indicative and will be finalised prior to our Business Plan submission in June 2016.
[3] During July and August 2015, Perceptive Insight Market Research Ltd independently surveyed 1200 domestic electricity customers. The figure of £7 is the median of all customers independently surveyed (using a clean sample) whilst £5 is the median of those customers who are deemed to be in income poverty.
[4] All of the proposals included in this consultation are subject to a price control which will be determined by the Utility Regulator.

# What you are telling us

We have been talking to electricity users in Northern Ireland for the last six months on their thoughts on our current service and how they would like to see it improve. This has provided us with lots of feedback and this document sets out what we believe are the best practical and cost effective ways of responding to your requests.

There are a number of areas that we would describe as 'business as usual' and we will need to continue. This includes maintaining legal, safety, customer and asset replacement standards. However, there are a number of areas where you have indicated you would like to see our service improve or change.

















***We now want to hear what you think***

# How to respond

The rest of this document summarises our investment proposals. Each section includes some questions. We have summarised all of these questions below. You may wish to answer all of them, or just those you think are relevant to you. You can do this:

- **Online** at www.nienetworks.co.uk/haveyoursay
- **By sending your response to:**

  Perceptive Insight Market Research Ltd (NIE Networks Research)
  Jacob Peterson House
  109 Bloomfield Avenue
  Belfast, BT5 5AB

- **Or by email:** haveyoursay@nienetworks.co.uk

**This consultation closes on Friday 27th November 2015.**

### Maintaining our current service levels

1. Do you agree that NIE Networks' investment programme should, as a minimum, aim to maintain its current service levels until 2024?

### Improving customer service

2. How can we make it easier for our customers to communicate with us?
3. Do you agree with our strategy for improving our overall customer service?
4. Are there other areas that we haven't considered?

### Reducing unplanned power cuts

5. Do you agree that NIE Networks should focus its investment programme on improving the service for homes and businesses by reducing power cuts?
6. Which of the investment options do you support?

### Increasing resilience to severe weather

7. Do you agree that NIE Networks should increase investment in this area to improve the networks' resilience to severe weather?
8. Which of the investment options do you support?

### Building a smarter network

9. Do you agree that NIE Networks should invest in exploring new technologies and approaches that could be used to solve network problems and avoid costly reinforcements in the future?
10. How many trials of this type do you think NIE Networks should carry out – 3 or 5?
11. What are the top 2 projects from this list that you would like to see NIE Networks deliver and why?
12. Are there any areas that you think we shouldn't be focusing on?
13. Are there other trials that we should also be considering?

### Connections

14. What aspects of the new connections process would you most like NIE Networks to focus on?

# Maintaining our current service levels

## Maintaining our current service levels

### What you said:

> “93% of households and 84% of business customers told us that you want our current level of service to be maintained as a minimum.”

Source: Perceptive Insight Market Research Customer Survey

### Our proposals:

From 2017-2024 we will continue to:

- Keep the network safe and provide a reliable service for homes and businesses.
- Inspect & maintain our network to identify and deal with problems.
- Develop the network to meet increasing demand from existing and new customers.
- Repair faults and keep customers up to date with information over the phone and online.
- Replace and upgrade equipment due to age and condition.

Approximately 50% of Northern Ireland’s electricity network is now over 40 years old and more than a quarter of the network is over 50 years old. The majority of the electricity network was built in the 1960s and 1970s as part of the rural electrification programme which expanded the network to all corners of Northern Ireland.

From 2017 to 2024 about 6.5%[5] of the network will need to be updated due to age and condition. In addition, new legislation recently introduced[6] increases safety requirements particularly with respect to clearances from overhead lines. Some additional expenditure will be required over the next ten years to achieve compliance.

During RP5[7] (2012 to 2017), we are investing **£341m** to maintain our current service levels. This core area of investment is our largest programme of work.

At NIE Networks, we have a proven track record of delivering a continually improving service to our customers within the regulatory price control budget. For example:

- This is reflected in a 35% reduction in network charges since NIE Networks was privatised in 1993. This has been achieved against the background of significantly increased capital investment.
- The key metric of network performance, 'customer minutes lost due to faults', is now approximately one third of what it was at privatisation and it benchmarks well with GB networks with comparable network topologies.
- Since the commencement of RP5, there have been no defaults against our guaranteed standards[8], all targets for our overall standards have been met and only 11 complaints have been referred to the Consumer Council for NI.

This drive for business efficiency makes sense for NIE Networks and customers and will continue to be at the centre of our delivery approach between 2017 and 2024.

**Consultation question:**
Do you agree that NIE Networks' investment programme should, as a minimum, aim to maintain its current service levels until 2024?

5 Financial modelling shows that asset replacement expenditure in the short to medium term is expected to be of the order of 1% of MEAV (modern equivalent asset value) per annum.
6 The Electricity, Safety, Quality of supply and Continuity Regulations.
7 Regulatory Period 5
8 At NIE Networks, we have standards to help us address customer issues and queries as quickly as possible. More information is available on our website www.nienetworks.co.uk/help-advice/customer-standards



# Improving customer service

## Improving customer service

### What you said:

> “You want to be able to contact us on the phone, online, in writing and by social media and you want us to provide timely and useful answers. You would like us to keep you up to date with any changes to your electricity service. In addition, you would also like us to keep planned interruptions to a minimum.”

Source: Perceptive Insight Market Research Customer Survey

At NIE Networks we are committed to keeping our customers at the centre of our focus. We aim to provide a safe, reliable and responsive electricity service, which endeavours to meet the standards our customers expect. Our track record for customer service includes:

- Responding to severe weather events: Our well rehearsed emergency plan includes ‘ramping up’ contact centre resources – we have trained general office staff specifically in the use of contact centre and call handling systems. In the event of bad weather or storms we are able to increase the number of call handlers significantly. This enables us to deal with high volumes of calls during very busy periods whilst maintaining staff numbers at an efficient number for business-as-usual activities;

- A dedicated team of Customer Relations Managers across NI who deal promptly with local customer issues.

- Accreditation of our asset management processes: We have excellent asset management processes in place to ensure that we make the right asset investment decisions for our customers. In September 2013 we attained PAS 55 accreditation (Publically Available Standard 55) which has been developed by the Institute of Asset Management and is a internationally recognised Asset Management standard.

Over the last five years, we have made the following improvements to the service we provide to customers:

- We have rolled out a major customer care training programme with a focus on customer service training for our employees.
- In 2012, we introduced an online service allowing customers to report power cuts via their computer or internet enabled mobile phone.
- In 2013, we introduced a 9.00am-4.30pm service on Twitter for information on power cuts and other queries and improved our systems to provide more accurate customer information during power cuts.
- We are currently trialling an addition to our online service called 'Powercheck' which is a network map that will allow customers to view power cut information in real time. This will go live during November 2015.

**We will continue this drive towards an improved customer experience over the next 7 years, our plans include:**

## Customer self service

**We are planning to provide a new multi-channel communication approach that will allow you to:**

- Report a power cut
- Receive up to date information on the progress of our repair teams.
- Receive notifications about planned work on our network
- Submit your meter reading
- Receive up to date information about your application for a connection to the electricity network


**In addition, we are planning to:**

- Increase our social media coverage to allow people to contact us via twitter on a 24/7 basis.
- Proactively promote our critical care list to raise awareness of the list's benefits amongst customers who depend on electricity operated healthcare equipment.
- Provide a dedicated contact at each local incident centre for our critical care customers to contact during weather events that cause widespread power cuts.

**Consultation questions:**
How can we make it easier for our customers to communicate with us?
Do you agree with our strategy for improving our overall customer service?
Are there other areas that we haven't considered?

Reducing unplanned power cuts

# Reducing unplanned power cuts

## What you said:

> “Most customers understand that unexpected power cuts happen, however, you told us that reducing them was one of your top priorities. In particular, you would like to see a reduction in power cuts for those who experience them more frequently or those who are without power for longer.”

Source: Perceptive Insight Market Research Customer Survey

## Our proposals

On average there are 7500 power cuts in Northern Ireland every year[9]. These are caused by faulty equipment, contractor damage, weather, vandalism and many other reasons. Good network maintenance programmes, such as those carried out as part of NIE Networks' Business as Usual programmes, help minimise power cuts but will not stop them completely.

In nine out of ten cases, NIE Networks restores power within three hours. However around 5,000 homes and businesses every year experience unplanned power cuts which last over 10 hours. If there are major storms or extreme weather events this number may rise significantly. You have said you would like us to improve our performance in this area by reducing the number of customers who are experiencing power cuts over 10 hours in duration. We believe that improving performance in this area by **25%** represents the best value option for customers. However, the actual cost of making this improvement is higher than what customers said they were willing to pay[10].

From 2017-2024, we would target the electricity lines which have experienced regular power cuts due to faults on the network[11]. We would develop specific plans to improve these parts of the network and ensure that the 12,000 homes and businesses fed from them see an improved service. With targeted investment, we believe we can reduce the number of customers who experience regular power cuts. You told us that you support investment to improve performance in this area in principle; however there did not appear to be a high willingness to pay for these improvements from the rural customers[12]. We believe that investments in this area are cost-effective and represent good value for rural customers. One of our options includes a modest level of investment in this area.

[9] Figure based on average number of faults between 2004 - 2014 excluding those occurring during extreme weather events
[10] Domestic customers told us they would be willing to pay an extra 68p for a 25% improvement or £1.16 for a 50% improvement.
[11] Initially targeting the 12,000 customers who have experienced 6 or more power cuts over the last 18 months.
[12] Typically customers affected by frequent power cuts live in rural areas.

# Options for investment

## Option 1

| | | | Annual Cost per Customer[13] (£) | | |
|---|---|---|---|---|---|
| Service Improvement | How? | RP6[14] Cost (£m) | Domestic Customers | Small and Medium I & C Customers | Large I & C Customers |
| Reduce the number of customers per year who are experiencing power cuts over 10 hours in duration by **25%** | 1. Investment in low voltage generation and associated technology to resupply customers whilst the fault is located.<br>2. Increasing the number of dedicated resources available for fault and emergency response by approximately **80%** [15]. | 11.48 | 1.15 | 11.05 | 668 |
| **Total** | | **11.48** | **1.15** | **11.05** | **668** |

## Option 2

| | | | Annual Cost per Customer (£) | | |
|---|---|---|---|---|---|
| Service Improvement | How? | RP6 Cost (£m) | Domestic Customers | Small and Medium I & C Customers | Large I & C Customers |
| Reduce the number of customers per year who are experiencing power cuts over 10 hours in duration by **25%** | 1. Investment in low voltage generation and associated technology to resupply customers whilst the fault is located.<br>2. Increasing the number of dedicated resources available for fault and emergency response by approximately **80%**[16]. | 11.48 | 1.15 | 11.05 | 668 |
| Reduce the number of customers who experience 6 or more power cuts in an 18 months period by **20%**. | Investment in the **20** worst performing rural circuits through a mix of:<br>- Circuit reconfiguration<br>- Targeted network reinforcement<br>- Application of distributed automation to automatically locate and isolate faulty sections of network (self healing network). | 5 | 0.18 | 1.70 | 103 |
| **Total** | | **16.48** | **1.33** | **12.75** | **771** |

**Consultation questions:**
Do you agree that NIE Networks should focus its investment programme on improving the service for homes and businesses by reducing power cuts?
Which of the investment options do you support?

[13] These figures are based on an average domestic bill of £137, Small I&C bill of £1,322 and large I&C bill of £80,022. (I&C – Industrial and Commercial)
[14] RP6 – Regulatory Period 6 which is expected to run from October 2017 to March 2024.
[15] During normal office hours only.
[16] As above.

# Increasing resilience to severe weather

## Increasing resilience to severe weather

### What you said:

> “This came out as your top priority. You told us that customers value electricity the most during periods of severe weather as they rely on it for heating and lighting.”

Source: Perceptive Insight Market Research Customer Survey

In the last five years Northern Ireland has experienced severe ice, snow, winds and floods, all of which have affected the electricity network and left thousands of customers without power (some for several days).

Ice-accretion, which is the cause of the most extreme events for customers, occurs when ice or snow builds up on overhead lines. The weight of this ice or snow often breaks conductors with a smaller cross-sectional area and can lead to broken poles as well. Electricity lines that are built from stronger poles and conductors with a larger cross-sectional area are less likely to be damaged by ice-accretion thus reducing the impact on customers.

Although these events are relatively rare, the impact on homes and businesses may be significant.

### Our proposals

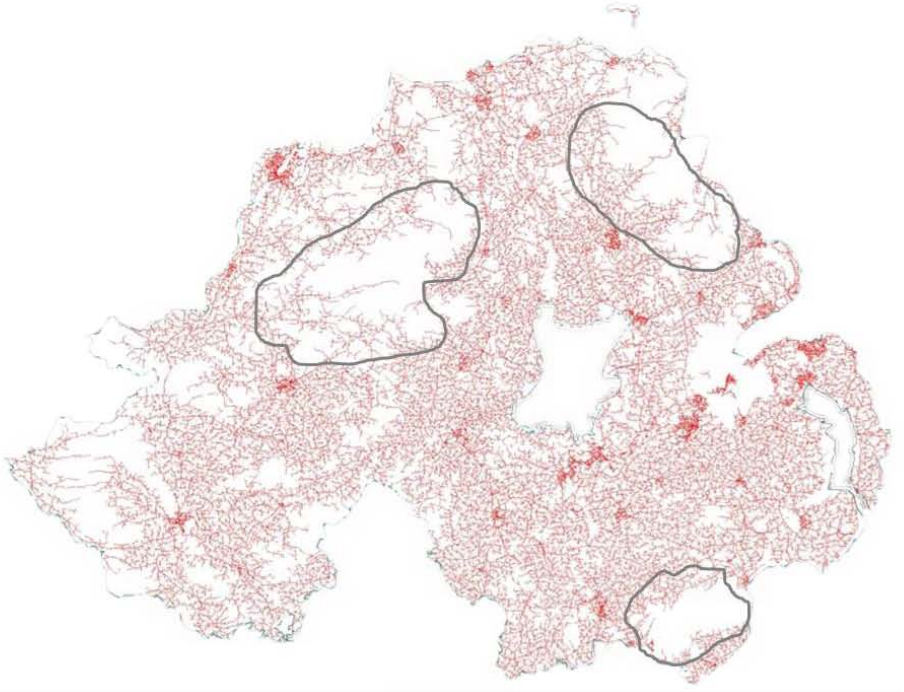
Some of the measures we propose taking:

- **Strengthening electricity lines in upland, rural areas** which are more susceptible to damage from ice or snow. Over the last five years there have been three weather events which have caused ice and snow to build up on electricity lines and bring them down. In 2010 and 2013, over 15% of customers suffered power cuts that lasted several days due to ice accretion.

The impact of widespread power cuts like these is felt not just by domestic customers but also by businesses in the worst affected areas. This can have a knock-on affect on the local economy as work to restore power supplies can take several days. For example, in 2010 NIE Networks carried out repairs equivalent to rebuilding 125 kilometres of overhead line (the equivalent of rebuilding a line from Belfast to Enniskillen) over a period of 5 days. These restoration efforts required the help of 300 extra lines people from Republic of Ireland and Great Britain.

By increasing the conductor size of electricity lines and putting in stronger poles, we believe we can reduce the impact of this type of weather on the electricity network. We have assessed the risk that these types of events pose to our overhead line network and have identified three regions that are deemed to be high risk. This includes network located near the **Mourne Mountains**, the **North Antrim Plateau** and the **Sperrin Mountains**. In total, the network identified consists of 20% of the 11,000 volt network and supplies power to approximately 46,000 customers.

The two options we have identified for **strengthening electricity lines in upland, rural areas** vary by pace. If we commit to carrying out the work over a **15 year** period, then this will reduce the risk for approximately **20,000** homes and businesses by 2024. If we commit to a slower pace and carry out the work over a **20 year** period, then this will only reduce the risk for approximately **15,000** homes and businesses by 2024.



Areas where the network is deemed to be a higher risk zone for ice accretion

As part of the business plan submitted for RP5, a longer term project to address ice accretion risk for the full 11kV network over a 15 year period was proposed. This proposal was not approved by the Competition and Markets Authority, given the scale of the project and the requirement for further analysis of the customer benefits. The two options proposed for RP6 (and beyond) are more focussed on the areas of highest risk in Northern Ireland and the total project cost for either option would be less than 20% of that proposed for RP5. While the ice accretion risk remains a potential province wide issue, targeting investment at least addresses the three areas of highest risk.

- **Increasing flood defences in substations** – substations are network hubs which can feed electricity to thousands of homes and businesses. If flooding affects a substation, it could knock out power to all surrounding properties. In the last 3 years flooding has affected more than 15 major substations and put tens of thousands of customers at risk of long term power cuts. We therefore propose to put flood defences in a number of substations which have been identified as being susceptible to flooding.

- **Clearing trees from the network** – Although NIE Networks cuts back vegetation growing close to electricity lines for safety reasons, when there are strong winds trees often fall down onto power lines. To help minimise the impact of this, we can also clear trees within falling distance of the lines. We propose to increase our current programme – clearing more trees within falling distance of electricity lines in order to protect them during severe weather.

# Options for investment

## Option 1

| | | | Annual Cost per Customer (£) | | |
|---|---|---|---|---|---|
| Service Improvement | How? | RP6 Cost (£m) | Domestic Customers | Small and Medium I & C Customers | Large I & C Customers |
| Reduce the likelihood of power cuts during severe weather | Upgrade 20% of the 11,000 volt network over a **15** year period to increase resilience to ice accretion. This will reduce the risk of power cuts for **20,000** homes and businesses between 2017 and 2024. | 21.87 | 0.77 | 7.42 | 449 |
| | Protect 9 major substations and **200** local substations from flooding from 2017 to 2024. This will reduce the risk of power cuts caused by **substation flooding** for **53,000** homes and businesses. | 4.4 | 0.16 | 1.49 | 90 |
| | Cut trees back on a **20** year programme to reduce the likelihood of power cuts during storms. Over 2017 – 2024, this will address **32.5%** of the main network. | 7.57 | 0.27 | 2.57 | 155 |
| **Total** | | **33.84** | **1.20** | **11.48** | **694** |

## Option 2

| | | | Annual Cost per Customer (£) | | |
|---|---|---|---|---|---|
| Service Improvement | How? | Cost (£m) | Domestic Customers | Small and Medium I & C Customers | Large I & C Customers |
| Reduce the likelihood of power cuts during severe weather | Upgrade 20% of the 11,000 volt network over a **20** year period to increase resilience. This will reduce the risk of power cuts for **15,000** homes and businesses between 2017 and 2024. | 14.09 | 0.50 | 4.78 | 289 |
| | Protect 9 major substations and 400 local substations from flooding from 2017 to 2024. This will reduce the risk of power cuts caused by **substation flooding** for **73,000** homes and businesses. | 7 | 0.25 | 2.38 | 144 |
| | Cut trees back on a 15 year programme to reduce the likelihood of power cuts during storms. Over 2017 – 2024, this will address **43%** of the main network. | 11.36 | 0.40 | 3.85 | 233 |
| **Total** | | **32.45** | **1.15** | **11.01** | **666** |

# Managing planned interruptions

We recognise some of these network upgrades will require an increase in planned power cuts whilst the work is completed. We are currently updating our strategy for managing planned interruptions to ensure that we can limit these where possible. This includes continuing to install low voltage generators at substations that supply high numbers of customers so the work can proceed without a supply interruption. We are also proposing to:

- Increase the number of temporary switches installed in advance of planned work on our back bone overhead line network by our specialist live line teams so we can limit the amount of customers that have their electricity supply interrupted at any one time.

- Trial high voltage generators to investigate whether they can be used to reduce power cuts on branch spur lines.

**Consultation questions:**
Do you agree that NIE Networks should increase investment in this area to improve the networks' resilience to severe weather?
Which of the investment options do you support?

Building a smarter network

# Building a smarter electricity network

**What you said:**

> You told us that trying out and testing new equipment which could support the rising levels of renewable technology connecting to the electricity network is important to you.

Source: Perceptive Insight Market Research Customer Survey

## Our proposals

From electric vehicles to photovoltaic (PV) panels installed on the roofs of houses, the way that electricity is produced and consumed is changing. NIE Networks needs to understand the effect that these changes may have on the electricity flows on our network. This means that we need to be investing now to explore innovative technologies that can help us get the most out of the electricity network in the future. This will help us to understand how new technology can be used to increase the flexibility of the network and to avoid costly reinforcements.

Our plans for 2017 – 2024 are to explore a range of technologies and approaches which potentially could be rolled out across the network in the future. One of the ways that we propose to do this is by carrying out a number of discrete network trials. Details of five potential innovation projects are included below. In each case, further research is required before the scope and costs of each project is finalised:

| Trial name | Description | Customer benefit | Category |
|---|---|---|---|
| **A - Network Capacity** | Install technologies to monitor both low voltage and high voltage networks and re-configure in real time to release more capacity to support renewable generation and reduce peak demands on the network. | • Will help to facilitate the on-going connection of new technologies such as wind, demand side generator units, photo-voltaics, heat pumps and electric vehicle charge points. | Connecting Renewables |
| **B - Active Fault Level** | Investigate technologies that could potentially solve network fault level issues caused by increasing levels of renewable generation. | • Facilitate the increased connection of renewable generation<br>• Releases network capacity faster and at a much lower cost than traditional re-inforcement | |
| **C - Battery Technology** | Participate in collaborative research that will facilitate the connection of battery technologies used for energy storage. | • Facilitate the increased connection of renewable generation by releasing network capacity.<br>• Provide valuable research on the connection of battery technology that will be applicable to domestic and commercial customers. | |
| **D - Smart Fault Location** | Investigate technologies that will help NIE Networks to locate faults faster. | • Lead to faster restoration times during power cuts. | Getting the power back on |
| **E - Condition Monitoring** | Install more technologies that will help NIE Networks to manage substation assets such as transformers. | • Will optimise the life of existing network assets ensuring customers get full value for money. | Making your money go further |

In addition to the trials set out above, we will be considering other innovation techniques as part of our wider RP6 Business Plan.

## Options for investment

| | | | Annual Cost per Customer (£) | | |
|---|---|---|---|---|---|
| Option | Number of 'smart grid' trials (2017-2024) | RP6 Cost (£m) | Domestic Customers | Small and Medium I & C Customers | Large I & C Customers |
| Option 1 | 3 trials | 7.5 | 0.26 | 2.51 | 152 |
| Option 2 | 5 trials | 12.5 | 0.43 | 4.15 | 251 |

**Consultation questions:**
Do you agree that NIE Networks should invest in exploring new technologies and approaches that could be used to solve network problems and avoid costly reinforcements in the future?
How many trials of this type do you think NIE Networks should carry out – 3 or 5?
What are the top 2 projects from this list that you would you like to see NIE Networks deliver and why?
Are there any areas that you think we shouldn't be focusing on?
Are there other trials that we should also be considering?

# Speeding up connections to the network

## Speeding up connections to the network

### What you said:

> “Business customers across Northern Ireland told us that we should simplify the process for connecting to the electricity network and speed it up significantly. They would also like us to improve customer communication.”
>
> Source: Perceptive Insight Market Research Customer Survey

Connections costs are paid for by the customer seeking connection to the network, for example, if you want to connect your home to the electricity network you will have to pay for the full cost of this. However, as connections are a critical part of our business, we wanted to highlight some of the improvements that we are putting in place over the coming year.

Our aim is to provide a smooth, responsive and value for money connections service. To help us achieve this:

- We have restructured the organisation to establish a Network Connections business, with improved focus for delivery and to encompass all types of connections to the network within one business unit.

- We are ramping up our delivery resource to ensure as many renewable projects as possible can connect to the electricity network before March 2017 to avail of the NIRO incentives:



[17] The Northern Ireland Renewables Obligation

| | 2014 | 2015 | 2016 |
|---|---|---|---|
| **Number of small scale generators (<5MW)** | 130 | 250 | 380 |
| **Number of Large generation sites (>5MW)** | 4 | 3 | 16 |

- We have appointed a dedicated account manager to liaise with business customers to better understand their connection requirements and improve accountability for delivering against their timescales.
- We have simplified our connections application forms and will be introducing more online services for applications and updates.

**Going forward, we will:**

- **Provide a faster and more efficient connections service.**
  We are aiming to reduce our key process cycle times during 2016 by 20% for demand connections. This includes:
  - the average time taken to quote and
  - the average time to provide a completed connection.
- **Enhance engagement with customers seeking a connection to the network**
  - Work with customers to identify where processes can be improved and then quickly implement changes.
  - Host quarterly workshops for connection customers to allow better understanding of the processes.
- **Facilitate a competitive market**
  - Work closely with the Utility Regulator to ensure that we meet the agreed timescales for a fully contestable market.

**Consultation question:**
What aspects of the new connections process would you most like NIE Networks to focus on?

Additional Information

# Additional Information

**Investment levels and customers' willingness to pay:**

In July and August 2015, we conducted a survey across 1200 domestic customers and 500 business customers. In the domestic customer survey, we asked each respondent how much they were willing to pay for specific service improvements. We have used this figure as a guideline and extensively offered options which are below the amount of money home owners stated they would be willing to pay for service improvements.

Full details of this survey, including details of how willingness to pay was calculated, are available on our website **nienetworks.co.uk/haveyoursay**

**Investment options no longer considered due to lack of customer support**

The feedback we have received over the last six months has highlighted a number of areas where there is a lack of support for investment. We have taken this feedback on board and as a result, our plans no longer include:

- Investments to underground overhead lines in areas of outstanding natural beauty.
- Investments to underground overhead lines in urban areas.
- Investments to resolve bird fouling issues.

**Other areas for potential investment:**

In addition to the proposals included within this document, there are some other areas for potential investment which may be considered: These include:

- Power Parks: Investing in infrastructure to support the growth of the Northern Ireland economy which would enable NIE Networks to provide additional network capacity for new inward investment and to support growth for existing NI businesses.

- Increasing network access: Targeted investment in the distribution[18] network to release capacity and enable increased levels of renewable generation to connect to the network.

These other areas may be included as part of future customer and stakeholder research initiatives prior to the submission of our Business Plan in June 2016.